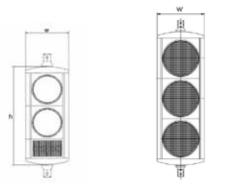
ALUSTAR

DIMENSIONS - TECHNICAL DETAILS

ALUSTAR ACOUSTIC



D	DIMENSIONS			
Le	ens diameter	Number of aspects	w / h / d [mm]	
10	00 mm	1	160 / 202 / 95	
		2	160 / 322 / 95	
		3	160 / 442 / 95	
21	10 mm	1	300 / 330 / 135	
		2	300 / 570 / 135	
		3	300 / 810 / 135	
30	00 mm	1 2 3	390 / 434 / 180 390 / 764 / 180 390 / 1094 / 180	
_	10 mm USTAR ACOUSTIC	2½	300 / 640 / 135	

TECHNICAL DETAILS

Material	a combination of aluminium housing and UV-stabilized polycarbonate front		grey-blue (■ RAL 5008) pebble-grey (■ RAL 7032) fir-green (■ RAL 6009) brilliant aluminium (■ RAL 9006)
Diameters	100/210/300 mm aspects: 1, 2, 3 as standard; more aspects on request ALUSTAR ACOUSTIC: 210 mm, 2 ½ aspects	Housing colors	grey aluminium RAL 9007 black
Optic	100 / 210 / 300 mm FUTURLED		Mounting: two-point-fixation by means of brackets in different lengths of 105 mm, 183 mm,
Impact resistance	High (Class IR3 acc. to EN 60598-1)	Options	240 mm with L-shaped brackets one-sided mounting, either on top of a pole or hanging from a cantilever DSI bracket
Ingress protection	water- and dust-proof (IP54) – EN 60529		two-point-fixation on cantilever bracket backing Boards : special lateral profiles
Certified	in accordance with EN12368 CE certification obtained		available for fixation of backing boards
	GE Certification obtained	ALUSTAR ACOUSTIC	red light: 75-80 beeps p.m. green light: 750-800 beeps p.m.
Protection	Class II – double or reinforced insulation		volume: 30-90 dB(A) (adjustable)
classification			automatic adjustment in line with surrounding noise level

ALUSTAR



SWARCO FUTURIT

SWARCO FUTURIT is the leading global player in LED-based signalling technology. The company specialises in traffic lights, variable message signs, street lighting and railway signals using the very latest developments in light emitting diode (LED) technology offering ecological friendliness and the advantages of low failure rate, energy-saving and a long operating life.

Customers in over 60 countries around the world rely on the outstanding quality of SWARCO FUTURIT products, made in Austria to the highest standards and supporting road safety and improved traffic flows.

SWARCO FUTURIT Verkehrssignalsysteme GesmbH

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SWARCO FUTURIT Verkehrssignalsysteme GesmbH





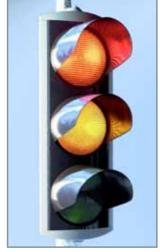
ALUSTAR - LED TRAFFIC SIGNAL HEAD

DESIGN MEETS OPTICAL PERFORMANCE

SWARCO FUTURIT, world leader in the development and production of LED traffic signal heads, proves its competence by showing that sophisticated traffic lights can combine superb optical quality with an attractive design. The robust ALUSTAR signal head harmoniously integrate into urban landscapes without compromising the basic function of clear and unmistakable signaling.

DESIGN & OPTICAL BRILLIANCE

The award winning design of SWARCO FUTURIT's LED-based ALUSTAR combines an aluminium housing with a polycarbonate front cover. Many cities select ALUSTAR for its intelligent combination of unparalleled optical performance, reliability, robustness and its attractive design which compliments today's cityscapes. The 210 mm pedestrian signal is available with an integrated acoustic signal unit housed within the lower part of the signal head, called ALUSTAR ACOUSTIC. The acoustic feature adds to the safety for pedestrians at signalized crossings without any seperate loudspeaker.



ALUSTAR



INCREASING SAFETY AND SAVING ENERGY

ALUSTAR and ALUSTAR ACOUSTIC are predestined to increase safety at intersections and beautify them at the same time.

- available in diameters of 100, 210 and 300 mm
- lowest power consumption and brilliant optical performance
- proven technology
- no need for maintenance
- longevity
- vandalism-proof aluminium housing
- wide range of colors due to powder coating
- three different types of fixation

ALUSTAR

Key Benefits

- first aluminum signal head only designed for LED technology
- available in ø 100 / 210 / 300 mm
- available in many different colors
- installations in more than 50 countries worldwide
- FUTURLED optic ensures lowest power consumption and a brilliant light output
- proven technology
- eliminates the need for maintenance
- high reliability and longevity of operation
- vandalism-proof
- vertical and horizontal mounting
- sleek design, stylish and solid

ALUSTAR ACOUSTIC Key Benefits

- acoustic unit integrated into the signal head, thus there is no need for extra loudspeaker installation
- 4 loudspeakers integrated in the front of the signal head to sound directly into the pedestrian crossing during the green phase
- 2 loudspeakers integrated into the bottom of the signal head that sound during the red phase for orientation
- fully programmable acoustic settings accessible via IR Remote Handheld (signal volume, stroke rate)
- noise responsive sound level output adapted to ambient noise; day mode / night mode
- redundancy-based signal monitoring to avoid safety-critical situations
- faster installation due to reduced cabling

INSTALLATION EXAMPLES







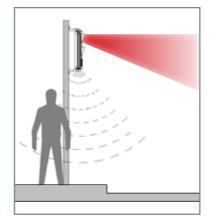


ALUSTAR ACOUSTIC

ALUSTAR is also available with an integrated acoustic unit, as ALUSTAR ACOUSTIC, that supports the unequaled optical performance with an audible feature in a single compact product. This innovative solution offers the advantages of improved service and safety to pedestrians at intersections (especially those visually impaired).

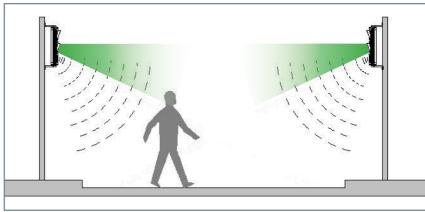
Repeating acoustic "beeps" generated by an electronic synthesizer – "beep" frequency depending on the state of pedestrian light:

RED phase



Pilot Tone = Audible Orientation Signal during red phase by speakers in the bottom of the signal head

GREEN phase



Clearance Tone = Audible Walk Signal during green phase by speakers in the front of the signal head

MOUNTING OPTIONS

In addition to the usual two-point-fixation with conventional bracket arms is also a one-sided mounting, directly on the pole by means of pipe-covers possible, for various pole diameters. The fastening on the special DSI bracket arm makes a one-sided mounting also possible, on the arm upright or upside down.



Conventional two-point-fixation with bracket arms



On-pole-fixation



One-sided mounting with special DSI bracket